

Claims

1. A method for producing protoplasts of cassava or a closely related species, which protoplasts are capable of regeneration into plants, comprising producing friable embryogenic callus from explants of cassava or a closely related species and isolating protoplasts from said friable embryogenic callus.
2. The method of claim 1, wherein the friable embryogenic callus is subjected to culture in a liquid medium.
3. The method of claim 1 or 2, wherein a mixture of cell wall degrading enzymes, such as a cellulase, a pectolyase and/or a macerozyme are used to produce protoplasts.
4. The method of claim 1, wherein the plants from which explants are taken are pretreated with an auxin.
5. The method of claim 1, wherein the friable embryogenic callus is produced from torpedo shaped primary or mature embryos.
6. The method of claim 5, wherein the embryos are induced on primary explants.
7. A protoplast obtainable by the method of anyone of the foregoing claims.
8. A method for transforming a protoplast of a cassava or a closely related species by providing said protoplast with additional genetic information through infection by a bacterium comprising said additional genetic information such as *Agrobacterium tumefaciens*, by electroporation or chemical poration providing a vector comprising said additional genetic information or by particle bombardment wherein the particles are coated with the additional genetic information, wherein a protoplast according to claim 7 is transformed.
9. A transformed protoplast obtainable by the method of claim 8.

10. The transformed protoplast of claim 9, wherein the additional genetic information comprises a gene of interest.

11. The transformed protoplast of claim 9, wherein the additional genetic information comprises an antisense construct.

12. The transformed protoplast of claim 11, wherein the antisense construct is capable of inhibiting the amylose synthesis pathway.

13. A method for regenerating plants from protoplasts, wherein the protoplast of anyone of claims 7 or 9-12 is induced to produce an embryo, which embryo is consequently induced to produce a plant.

14. A cassava plant or a closely related species thereof obtainable by the method of claim 13.

15. The plant of claim 14 obtainable from the protoplast of claim 12, wherein the tubers contain essentially no amylose.

16. A method for isolating starch from a tuber of the plant of claim 14 or 15 comprising the steps of:

- washing the tuber, followed by grating and milling it;
- separating starch from fibers and juice in a separator;
- sieving the starch;
- washing the starch; and
- drying the starch.

17. The method of claim 16, wherein the starch is washed in a hydrocyclone.

18. The method of claim 16, wherein the starch is dried in a vacuum filter followed by drying in a drying tower.

19. A starch obtainable by the method of anyone of the claims 16-18.

20. The starch of claim 19 having an amylopectin content of at least 95 wt.%, based on the (dry substance) weight of the starch.

21. The starch of claim 20 having an amylopectin content of at least 98 wt.%, based on the (dry substance) weight of the starch.